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09/761,670	01/18/2001	Jeffrey Scott Eder	AR - 16	5377
53787 ASSET TRUST	7590 10/05/201 C. INC.	EXAMINER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	09/761,670	EDER, JEFFREY SCOTT			
Office Action Summary	Examiner	Art Unit			
	SIEGFRIED E. CHENCINSKI	3695			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on 11 Au This action is FINAL . 2b) ☑ This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) Claim(s) 89-114 is/are pending in the application 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 89-114 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the objection to the objection and objection to the objection of the obj	vn from consideration. relection requirement. r. epted or b) □ objected to by the B				
Replacement drawing sheet(s) including the correcti		•			
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 7/22/10, 8/11/10.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 11, 2010 has been entered.

Status

2. Claims 89-114 are pending.

Claims 89-114 are new.

Claims 1-88 are canceled.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 89-114 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Independent claims 89, 98 and 106 rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Dependent claims 90-97, 99-105 and 107-114 are rejected because of their dependence on rejected independent claims 89, 98 and 106.

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4. Claims 89-97 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Independent claim 89 recites a process comprising compute and compute. Dependent claims 90-97 are rejected because of their dependence on independent claim 89.

Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876)). Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state. Without these elements the invention involves human interaction which is not patentable subject matter.

The machine-or-transformation test is a two-branched inquiry; an applicant may show that a process claim satisfies § 101 either by showing that his claim is tied to a particular machine, or by showing that his claim transforms an article. See Benson, 409 U.S. at 70. Certain considerations are applicable to analysis under either branch. First, as illustrated by Benson and discussed below, the use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility. See Benson, 409 U.S. at 71-72. Second, the involvement of the machine or transformation in the claimed process must not merely be insignificant extrasolution activity. See Flook, 437 U.S. at 590. (*In re Bilski*, En banc, U.S. Court of Appeals for the Federal Circuit, Washington, DC, Oct. 30, 2008). Per *In re Bilski*, these requirements must be present in each meaningful limitation step and must not merely rely on such limitations in the preamble.

In the instant case, the limitations beginning with compute and compute contain significant solution activity and must therefore contain the statutory component or refer to it.

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Further, the statutory component must more specifically be an automated programmed electronic computer or programmed computer processor or programmed computer server, since simply a computer could mean a human using a desktop computer to perform all of the linking steps by hand using various tools including a computer to perform all of the claimed tasks. For example, the first limitation containing the statutory component should be stated as " compute through the use of an automated programmed electronic computer system for one or more ...". Then, if the claimed invention is in fact a computer automated process, each prior (optional) and succeeding step could simply state "by" the computer system ...". Otherwise a human could still be using a computer to perform any steps which simply claim a "computer system".

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It is unclear to the examiner whether Applicant's disclosure supports the needed statutory components since a human figure is included in the drawings.

Applicant may have support for overcoming this rejection. If so. Applicant needs to point the location of the needed support in the response to this office action. Please note the Board of Patent Appeals Informative Opinion *Ex parte Langemyer et al*http://iplaw.bna.com/iplw/5000/split_display.adp?fedfid=10988734&vname=ippqcases2
http://iplaw.bna.com/iplw/5000/split_display.adp?fedfid=10988734&vname=ippqcases2
http://iplaw.bna.com/iplw/5000/split_display.adp?fedfid=128805&doctypeid=1&type=court&mode=doc&split=0&scm=5000&pg=0

5. Claims 98-105 are rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter. Independent claim 98 is directed to a computer-readable storage medium. Dependent claims 99-105 are rejected because of their dependence on claims 11 and 19.

The following is excerpted from the BPAI decision regarding claims 11-23, which references "Subject Matter Eligibility of Computer Readable Media," Notice of the Director, Jan. 26, 2010;", a copy if which his attached for Applicant's convenience:

"The claims broadly cover transient, propagating signals. The Specification is silent as to what the claimed "computer readable medium" covers. Since a claim to a "computer readable medium" reasonably broadly covers both forms of nontransitory tangible media

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and transient, propagating signals, it necessarily covers non-statutory subject matter. This is so because transient, propagating signals are not patentable subject matter. See *In re Nuijten*, 500 F.3d 1346, 1356 (Fed. Cir. 2007).

The four categories together describe the exclusive reach of patentable subject matter. If a claim covers material not found in any of the four statutory categories, that claim falls outside the plainly expressed scope of §101 even if the subject matter is otherwise new and useful. We must therefore determine whether any of the four categories encompass the claims on appeal, and it is appropriate to consider each of the categories in turn. *In re Nuijten*, 500 F.3d at 1354 (Fed. Cir. 2007). Because the scope of the claims is such that they include subject matter not patent-eligible under §101, the claims must be rejected under §101 as covering nonstatutory subject matter. *See also* "Subject Matter Eligibility of Computer Readable Media," Notice of the Director, Jan. 26, 2010; http://www.uspto.gov/patents/law/notices/10 l_crm_20100127.pdf.

For the foregoing reasons, we reject claims 11-18 under 35 U.S.C. § 101 as being drawn to nonpatentable subject matter." (p. 11. l. 6 – p. 12. l. 8).

Independent claim 98 fails to conform to the above guidelines established by Director Kappos' Subject Matter Eligibility notice and by the BPAI decision in the instant application by failing to include in the preamble "executable by a programmed computer" and by failing to explicitly narrow the claim to a non-transitory embodiment in the claimed limitations in order to avoid rejection under 35 USC 101.

Dependent claims 99-105 are rejected because of their dependence on rejected independent claim 98.

It is suggested that the preamble of claim AB be amended as follows: "A computer <u>executable non-transitory tangible storage</u> medium having computer instructions to perform method steps directing a computer with at least one processor to".

Correction is required.

6. Claims 89-114 are rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a specific and substantial asserted utility or a well established utility.

For a claim to be statutory under 35 USC 101 the following two conditions must be met:

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1) In the claim, the practical application of an algorithm or idea results in a useful, concrete, tangible result.

In this case, the independent claims 89, 98 and 114 do not produce a useful, concrete, tangible result because the claimed method, storage medium and system merely claim instructions to perform calculations. Calculations without being part of a set of concrete steps are abstract. Consequently the claims are an abstract activity without a useful, concrete and tangible result.

Dependent claims 90-97, 99-105 and 107-114 are rejected because of their dependence on rejected independent claims 89, 98 and 106.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 7. Claims 89-114 are rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a clearly asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.
- 8. Claims 89-114 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For an application in this case, see the rejection under 35 USC 101.
- 9. Claims 89-114 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

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one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. For example, the expression "vendor mix" and service level are not contained in the specification. Neither is there support for the claimed limitations in the independent claims, with claim 89 as exemplary: "compute a vendor mix from prior purchases, future commitments, and a forecast inventory depletion for each period of a forecast planning period based on one or more scenarios for an item demand, an item price, an item availability and a specified service level for each of a plurality of items; and compute one or more variables for each item based upon the computed vendor mix."

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 10. Claims 89-114 are rejected under 35 U.S.C. 112, second paragraph.
- a) Independent claims 89, 98 and 106 provide for the use of a processor to perform calculations, but, since the claims do not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.
- **b)** Further, each step in a method must present the active verb in the "verb+ing" format in order to present the limitation in an active verb format..
- c) Dependent claims 90-97, 99-105 and 107-114 are rejected because of their dependence on rejected independent claims 89, 98 and 106.
- 11. Claims 89-114 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are the steps which would lead an ordinary practitioner of the art to successfully apply the invention to produce a concrete, reproducible quantitative valuation result of a firm.

 For example,

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• Independent claims 89, 98 and 106 claim a method, storage medium and system for using a processor to compute two aspects of vendor mix.

None of these inventions contain all the essential steps which would lead an ordinary practitioner of the art to successfully apply the invention to produce a concrete, reproducible quantitative valuation result of a firm.

Dependent claims 90-97, 99-105 and 107-114 are rejected because of their dependence on rejected independent claims 89, 98 and 106.

12. Claims 89-114 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are the steps which give the invention practical application by concluding the steps with a real world end use.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 13. Claims 89-114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rush et al. (US 6,119,102, hereafter Rush) in view of Shepherd (US Patent 6,134,536). Re. claims 89, 101 & 106, a purchasing risk management method, storage medium and system implemented by a computer including a processor, comprising: using the processor to:
 - compute a vendor mix from prior purchases (Col. 19, I. 17 Bottom right in Table), future commitments (Col. 3, I. 10), and a forecast inventory depletion for each period of a forecast planning period based on one or more scenarios for an item demand (Col. 16, II. 2-13), an item price (Col. 4, I. 50), an item availability

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(Manuf. Lead time - Col. 4, II. 13-15. The ordinary practitioner would have seen it as obvious that this suggest item availability) and a specified service level for each of a plurality of items (Col. 4, II. 13-23); and

 compute one or more variables for each item based upon the computed vendor mix (Col. 2, I. 2).

BACKGROUND INFORAMTION:

Material Resource Systems (MRP's) became sophisticated with the growth and development of computer systems applications in business in the 1970's and 1980's. Computer Associates' ASK MANMAN system dominated in the 1980's into the early 1990's. SAP, Baan and others began to dominate in the mid- 1990's with very sophisticated systems. These systems integrate demand forecasts with manufacturing requirements, inventories, suppliers and accounting and accounts receivable and payable. Supply chain systems capabilities expanded these capabilities in approx. 1998 – 2000 when XML application overcame the communications challenge between disparate software systems. The XML application actually was solved in approx. the mid 1980's by IBM. Further, these techniques are taught to buyers, purchasing personnel and manufacturing personnel and related business administration students throughout the school systems of the USA.

Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of Rush with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ('MRP") (Rush, col. 1, II. 9-10).

Re. dependent claims 90-97, 99-105 and 107-114, Rush may or may not explicitly disclose these limitations as follows:

Re. claims 89, 101 & 106, wherein the one or more variables comprise an item trend variable.

Re. claims 90, 99 & 107, wherein the one or more variables comprise an item demand variability variable.

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Re. claims 91, 100 & 108, wherein the one or more variables comprise an item obsolescence risk variable.

Re. claims 92, 101 & 109, wherein the one or more variables comprise a variable that combines an item trend variable, an item demand variability variable and an item obsolescence risk variable.

Re. claims 93, 102 & 110, wherein the one or more variables comprise one or more metrics.

Re. claims 94, 103 & 111, wherein the one or more variables comprise a variable that combines a normalized item trend variable, a normalized item demand variability variable and a normalized item obsolescence risk variable where the scale of the item risk variable is reversed.

Re. claims 95, 104 & 112, wherein the variable has a utility in developing a composite forecast.

Re. claims 96, 105 & 113, wherein the method further comprises: preparing a plurality of data related to a commercial enterprise for use in analysis, identifying a set of data required for analyzing the commercial enterprise from the prepared data, analyzing the set of data in an automated fashion as required to identify one or-more statistics, and using the statistics and the set of data to develop a model of an enterprise current operation financial performance using one or more automated learning techniques where the commercial enterprise physically exists, and where the set of data comprises the one or more variables computed for each item based upon the computed vendor mix.

Re. claims 97 & 114, wherein the method further comprises:

preparing a plurality of data related to a commercial enterprise for use in analysis, identifying a set of data required for analyzing the commercial enterprise from the prepared data, analyzing the set of data in an automated fashion as required to identify one or more statistics, and

using the statistics and the set of data to develop a model of an enterprise current operation financial performance using one or more automated learning techniques where the commercial enterprise physically exists, and where the set of data comprises

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the one or more variables computed for each item based upon the computed vendor mix.

However, the ordinary practitioner of the art would have been fully familiar with analysis of item trend variables, item demand variability, item obsolescence risk, combined analysis of these variables, the fact that data variables are metrics, normalizing analysis, composite forecasts (represented by Rush's MRP system). Further, Rush's MRP deals with methods and systems which relate to and are used by enterprises which physically exist.

Therefore, the ordinary practitioner of the art would have seen it as obvious to have combined the disclosures of Rush with his own knowledge in order to develop a purchasing risk management method, storage medium and system implemented by a computer including a processor, motivated by a desire to provide a manufacturing requirements planning ('MRP") (Rush, col. 1, II. 9-10).

Response to Arguments

14. Applicant's arguments filed on August 11, 2010 have been fully considered but they are moot in view of the new grounds of rejection.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Siegfried Chencinski whose telephone number is (571)272-6792. The Examiner can normally be reached Monday through Friday, 9am to 6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle, can be reached on (571) 272-6746.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington D.C. 20231 or (571)273-8300 [Official communications; including After Final communications labeled "Box AF"]

[Informal/Draft communications, labeled "PROPOSED" or "DRAFT"]

Hand delivered responses should be brought to the address found on the above
USPTO web site in Alexandria, VA.

SEC

273-6792

At Unit 3695

September 30, 2010

/Charles R. Kyle/

Supervisory Patent Examiner, Art Unit 3695